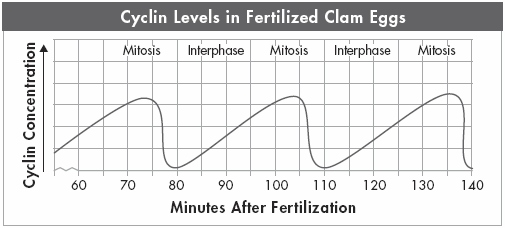
Analyzing Data

The Rise and Fall of Cyclins

Scientists measured cyclin levels in clam egg cells as the cells went through their first mitotic divisions after fertilization. The data are shown in the graph.

Cyclins are continually produced and destroyed within cells. Cyclin production signals cells to enter mitosis, while cyclin destruction signals cells to stop dividing and enter interphase.



1. Interpret Graphs How long does cyclin production last during a typical cell cycle in fertilized clam eggs?

2. Infer During which part of the cell cycle does cyclin production begin? How quickly is cyclin destroyed?

3. Predict Suppose that the regulators that control cyclin production are no longer produced. What are two possible outcomes?